

Serial No. 10/014,653  
Art Unit 1755

REMARKS

Claims 4-6, 10-11, 14-15 and 18-26 have been cancelled without prejudice to the filing of any future copending application and new claims 27-41 have been added. The claims now in the application are 1-3, 7-9, 12-13, 16-17, and 27-41.

The applicant has amended the application as required by the Examiner by adding a brief description of FIG. 6 to the section entitled BRIEF DESCRIPTION OF THE DRAWINGS.

The applicant affirms the election of claims 1-13, 16 and 17. Non-elected claims 14, 15 and 18-26 have been cancelled.

Enclosed herewith is a separate paper entitled AMENDMENT - WITH CHANGES IN "MARKED-UP FORM" - ATTACHMENT, that shows the deletions and additions to the application.

Also enclosed is Form-1449 and a copy of U.S. Patent No. 4,268,316 to Wills, Jr.

Enclosed too is a Amendment Transmittal Letter with fee calculation and check for the additional single independent claim fee. The total number of claims has been reduced.

Claim rejections - 35 USC §112

Claims 1-13 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite in the recitation of "major". The clause "as major components" has been deleted from the claims and the transitional phrase "comprising" has been replaced with the transitional phrase "consisting of". Support for claims is found in the application on pages 8 and 9, and TABLE II wherein the only ingredients in the dry blended cementitious composition are cement and CKD.

Claims 7 and 13 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite in the recitation of "sack". The term "sack" has been amended to "94 lb. sack". Support for the term is found on page 9, lines 11-15.

The applicant would like to also point out that all of the claims now in the application refer to a dry blended cementitious composition. Support for the word "blended" is found in the application and original claim 6.

No new matter has been added by this amendment. The following is relevant case law on this point:

The test is whether the disclosure of the application relied upon reasonably conveys to a person skilled in the art that the inventor had possession of the claimed subject matter at the time of the earlier filing date.... *Eiselstein v. Frank*, 52 F.3d 1035, 34 USPQ2d 1467 (Fed. Cir. 1995).

It is respectfully submitted that the application as filed establishes that the inventor had possession of the claimed subject matter of the amended and new claims at the time of filing and that the use of the transitional phrase "consisting of" in place of "comprising" merely narrows the amended claim from that of the original claim.

It is believed that all of the applicant's claims are now definite and satisfy the requirements of §112, second paragraph. Accordingly, reconsideration and removal of this grounds of rejection is respectfully requested.

Claim Rejections - 35 USC §103

Claims 1-13, 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Barbour '102 because the cement/CKD ratio claimed by the applicant overlapped with disclosed ratios claimed in Barbour '102.

With reference to Barbour '102 the Examiner also states that:

Barbour '102 is relied upon for the teaching that cement compositions containing both cementitious material and CKD are known in the art. Since the reference teaches that a fly ash mixture replaces a portion of the cement and the mixture contains a certain percentage of CKD, it can be determined that the amounts of CKD and cement overlap those claimed by the applicant. See column 6 and the examples. It would have been obvious to the skilled artisan to have employed amounts of CKD in accordance with those being claimed herein because overlapping ranges have long been held to constitute a *prima facie* case of obviousness. ....

This grounds of rejection is respectfully traversed.

It is believed that it would be helpful to review Barbour '102. Barbour '102 discloses a synthetic Class C fly ash composition that allegedly can be used in place of Class C fly ash. The synthetic Class C fly ash composition of Barbour '102 is a blend of Class F fly ash and CKD. Barbour '102 essentially teaches that the CKD is only required in order to utilize Class F fly ash instead of Class C fly ash in concrete. Therefore, the objective of Barbour '102 is to utilize Class F fly ash instead of the standard Class C fly ash by mixing Class F fly ash and CKD to produce his "synthetic Class C fly ash."

Barbour '102, therefore, essentially teaches that CKD is used strictly for the purpose of blending with Class F fly ash to produce that which Barbour '102 has defined as his "synthetic Class C fly ash." There is no disclosure or suggestion in Barbour '102 to use CKD without also using Class F fly ash. Accordingly, Barbour '102 can not, and does not, disclose or suggest a formulation with CKD and cement that does not also have Class F fly ash.

Barbour '102 at column 6, lines 46-53 (believed to be the passage referred to by the Examiner) disclosure of blends of 40-60 Class F fly ash and 60-40 CKD is definitely not a teaching of the use of blends of 40-60 cement and 60-40 CKD for producing a cement composition that is essentially entirely cement and CKD, as now claimed. It is respectfully submitted that Barbour '102 does not disclose or suggest to one skilled in the art to replace the Class F fly ash, or any other type of fly ash, with cement and to produce a formulation of cement and CKD as the Examiner is believed to have reasoned or implied.

All of the examples in Barbour '102 have been reviewed and while there is overlap of the cement/CKD ratio with some of the applicant's original claims there is no overlap with the other original claims that have additional limitations.

In particular, all of the Examples in Barbour '102, namely Examples 1-6, are for concrete mixes, which have a low percentage of cement plus CKD. Specifically, the percentage of cement plus CKD in the concrete mixes disclosed in his Examples is from a low of about 8.7% for Example 6, with a 80/20 blend of fly ash and CKD, to a high of about 17% for Example 5 with Mix AE-3. The latter Example computes as follows:

515. lbs. of cement  
110.2 lbs. of CKD (58% of 190 lbs.)  
625.2 lbs. of cement plus CKD

The total dry weight of the concrete mix is approximately

515 lbs. cement  
190 lbs. 42/58 blend (Class F fly ash and CKD)  
1870 lbs. stone  
1085 lbs. sand  
3660 lbs. dry ingredients,

which computes as about 17% cement plus CKD of the concrete mix on a dry basis.

It is respectfully submitted that Barbour '102 does not disclose or suggest the applicant dry blended cementitious composition that is:

at least about 70% cement and CKD, as claimed in original dependent claims 4 and 10, or

at least about 90% cement and CKD, as claimed in original dependent claims 5 and 11, or

essentially 100% cement and CKD, as disclosed in applicant's application at pages 8 and 9, and in Table II, as now claimed in all of the applicant's claims.

Furthermore, with regard to the ratio of cement to CKD, the Examples in Barbour '102 disclose a cement/CKD range from 2.15 to 8.64, both of which are found in Example 1. The lowest ratio in Barbour '102, namely Example 1, Mix D-5, computes as follows:

236. lbs. cement  
109.6 lbs. CKD (58% of 189 lbs.),  
which computes as a cement/CKD ratio of 2.15.

It is respectfully submitted that lowest value of 2.15 in Barbour '102 does not overlap with a cement/CKD ratio that is no greater than about 3/2 as claimed in original claims 3, 9 and 17.

While the amendment cancels some of the original claims, it is believed that it is important to the thorough review of Barbour '102 for establishing what that reference fairly discloses to an artisan.

In reviewing Barbour '102 it was noticed that reference is made not only to US 4,407,677 to Wills, Jr. (Wills, Jr. '677) that was cited by the Examiner, but also to US 4,268,316 to Wills, Jr. (Wills, Jr. '316). A copy of Wills, Jr. '316 is enclosed with this amendment.

Wills, Jr. '677 and Wills, Jr. '316 formulations all require fly ash in addition to cement and CKD, and in case of Wills, Jr. '677 also an aggregate. It is respectfully submitted that none of these references, nor Barbour '102, nor Barbour '111, disclose or suggest that the fly ash can be replaced with cement.

The applicant has amended the claims by either:

(1) essentially excluding other ingredients in his dry blended cementitious composition by the use of the transitional phrase "consisting of", or

(2) by providing the percentages of both cement and CKD in the dry blended cementitious composition that are higher than those disclosed or suggested in the references.

Accordingly, it is respectfully submitted that all of the claims now in the application are not disclosed or suggested by any of the references including Wills, Jr. '677 cited by the Examiner or Wills, Jr. '316 cited herein by the applicant.

Therefore, regardless of the ratio of cement/CKD, the dry blended cementitious compositions in the embodiments of the applicant's invention as now claimed do not overlap with any of the compositions disclosed by the references. Furthermore, it is respectfully submitted that one skilled in the art would:

(1) not be motivated to vary the compositions in the references to arrive at the dry blended cementitious compositions of the applicant as now claimed, and

(2) not be motivated to use the applicant's dry blended cementitious composition to form a slurry with water suitable for forming a hard core, including a hard core in an abandoned well,

from a fair reading of these references.

Furthermore, none of the references disclose or suggest a dry blended cementitious composition which is as economical as the dry blended cementitious composition claimed by the applicant as shown in Tables II and as compared by the applicant to the prior art formulations shown in III.

Since closing abandoned wells is a complete expense to the well owner, incurring such expense without any future revenue from the abandoned wells, makes the applicant's economical dry blended cementitious composition as claimed herein of great value to the well owner and subsequently to the public by preventing accidents related to such wells if the wells were not closed or not properly

closed. The cheaper the well closure cost the more apt the well owner will expeditiously close abandoned wells.

The C.C.P.A. has held that the:

The ever present question in cases within the ambit of 35 U.S.C. 103 is whether the subject matter as a whole would have been obvious to one of ordinary skill in the art following the teachings of the prior art at the time the invention was made. It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. *In re Rothermel*, 47 CCPA 886, 276 F.2d 393, 125 USPQ 328; *In re Wesslau*, 147 USPQ 391, 393, 353 F.2d 238.

Since the Examiner stated that it is anticipated that the next Office Action will be a final rejection, the applicant would like for the Examiner to consider the following.

It is believed that it would not be proper under 35 U.S.C. 103(a) to take the disclosure of Barbour '102 that teaches a synthetic Class C fly ash can be formulated by blending Class F fly ash and CKD while entirely ignoring that the sole purpose of the CKD was to enable the use of Class F fly ash instead of Class C fly ash, and then take the position that it would be obvious to substitute cement for the percentage Class F fly ash in the blend of Barbour '102 while retaining the CKD.

With the amendments made herein, and the fact that Barbour '102 discloses a concrete composition with no more than about 17% cement and CKD, Barbour '102 is not seen to disclose or suggest the applicant's dry blended cementitious composition that is essentially all cement and CKD, as now claimed.

The Examiner is respectfully reminded that relative to rejections predicated on 35 U.S.C. 103, prior patents are references for only what they clearly disclose or suggest. -In re Randol and Redford 165 U.S.P.Q. 586 (CCPA, 1970).

The applicant's dry blended cementitious composition which is essentially all cement and CKD is not disclosed in any of the references.

Accordingly, there is simply no disclosure or suggestion in the cited references of the dry blended cementitious composition of the applicant, as claimed in claims 1-3 and 30-33.

Therefore, it follows that there is simply no disclosure or suggestion in the cited references of the slurry formed from the dry blended cementitious composition of the applicant, as claimed in claims 7-9, 12 and 34-37.

It then follows that there is simply no disclosure or suggestion in the cited references of a hard core produced from the applicant's slurry, as claimed in claims 13 and 38-41.

With regard to claims 16 and 17, these original process claims have been amended and now contain the steps of:

- (c) installing the hydraulic cementitious slurry in the abandoned well; and
- (d) allowing the hydraulic cementitious slurry to cure in the abandoned well and form a competent hard plug having a compressive strength of at least about 1000 psi with a maximum permeability of 0.1 millidarcey in the abandoned well.

Accordingly, it also follows that there is simply no disclosure or suggestion in the cited references of a process for closing an abandoned well by forming a slurry from the dry blended cementitious composition of the applicant,

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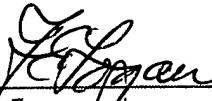
installing the slurry in an abandoned well and allowing the slurry to cure and form a competent hard plug, as now claimed in claims 16-17 and 27-29.

For the reasons set forth above, it is respectfully submitted that a §103(a) rejection of the applicant's claims now in the application would be improper under existing case law; see above cites. However, should the Examiner be relying on facts within her own personal knowledge or her expertise in cement/concrete industry to conclude that one skilled in the art would still have known that the dry blended cementitious composition of the applicant's as claimed would produce an economical formulation for closing abandoned wells, then as provided in MPEP, §2144.04 C., applicant respectfully requests that the Examiner either submit an affidavit of her expertise in this field, or provide actual evidence of art which discloses or suggests such modification of the invention of Barbour '102 and/or the other cited references.

Accordingly, based on the evidence of record, it is believed that the application and claims are now in condition for allowance. Reconsideration and allowance of all of the applicant's claims is therefore requested.

Since the independent claims 1, 7 and 16 have been amended to include the transitional phrase "consisting of", dependent claims 4, 5, 10 and 11 have been cancelled even though these claims are not believed to be obvious in view of Barbour '102.

Respectfully submitted,

  
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Serial No. 10/014,653, Filing Date 10-26-01

Applicant: James H. Trato

Art Unit: 1755

Examiner: Elizabeth D. Wood

Dkt. No.: 843A

AMENDMENT - WITH CHANGES IN "MARKED-UP FORM" - ATTACHMENT

Sir:

In response to the Office Action of 7/23/03, the amended claims in marked-up form are enclosed.

CERTIFICATION OF MAILING

I, F. Eugene Logan, hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450,

on 10/23/03 by F. Eugene Logan. Date Signed: 10/23/03 Signature: F. Eugene Logan

1. (Amended) A dry blended cementitious composition [comprising] consisting of cement and CKD [as major components] and having a weight ratio of cement to CKD between about 2/3 and 3/1.

7. (Amended) A hydraulic cementitious slurry comprising:

a predetermined amount of a dry blended cementitious composition [which comprises] consisting of cement and CKD [as major components and has] with a weight ratio of cement to CKD [is] between about 2/3 and 3/1; and

a predetermined amount of water of at least about 6 gallons per 94 lb. sack of the dry cementitious composition.

13. (Amended) A hard cured cementitious body produced by curing the hydraulic cementitious slurry of claim 7, wherein the predetermined amount of [a] the dry blended cementitious composition [which comprises cement and CKD], the weight ratio of cement to CKD, and the predetermined amount of water per 94 lb. sack of the dry blended cementitious composition are effective values for causing the hard cured cementitious body to have a compressive strength of at least about 1000 psi and a maximum permeability no greater than 0.1 md.

16. (Amended) A process for forming a hydraulic cementitious slurry effective for closing an abandoned well, and for closing the abandoned well, comprising:

(a) dry blending a predetermined amount of cement and a predetermined amount of CKD to produce a dry blended cementitious composition consisting of the cement and the CKD, and wherein the predetermined amounts of cement and CKD [having] have a weight ratio of cement to CKD between about 2/3 and 3/1; [and]

(b) slurring the dry blended cementitious composition with a predetermined amount of water sufficient to form a hydraulic cementitious slurry effective for closing [an] the abandoned well;

(c) installing the hydraulic cementitious slurry in the abandoned well; and

(d) allowing the hydraulic cementitious slurry to cure in the abandoned well and form a competent hard plug having a compressive strength of at least about 1000 psi with a maximum permeability of 0.1 millidarcey in the abandoned well.

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Please add new claims 27-41 and cancel claims 4-6, 10-11, 14-15 and 18-26.

The claims now in the application are 1-3, 7-9, 12-13, 16-17 and 27-41.

Respectfully submitted,



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